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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,721	11/20/2003	Daniel R. Pavlik	P-20005.00	8711
27581	7590	03/17/2008		
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924			EXAMINER HELLER, TAMMIE K	
			ART UNIT 3766	PAPER NUMBER
			MAIL DATE 03/17/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/717,721

Applicant(s)

PAVLIK ET AL.

Examiner

TAMMIE HELLER

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-25 is/are pending in the application.
- 4a) Of the above claim(s) 15-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 1-13 and 25, in the reply filed on December 26, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

2. The abstract of the disclosure is objected to because it is not of a length sufficient to briefly described the invention. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-13 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (U.S. Patent No. 6,249,708), herein Nelson. Regarding claim 1, Nelson discloses a medical electrical lead that includes a component 30 having a groove 40 and a conductor 44 extending within the lead and including a portion positioned within the groove (see Figure 3). Further, it can be seen from Figure 3 that the groove 40 has depth and the conductor 44 has a diameter, wherein the diameter may be greater than the depth of the groove. Alternatively, one of ordinary skill in the art would recognize that the pre-weld diameter of the conductor may be smaller than,

larger than, or the same size as the depth of the groove 40. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to choose from these three finite, identified solutions when determining the appropriate ratio between the diameter of the conductor and the depth of the groove. Furthermore, Nelson discloses forming a resistance weld between the conductor and components of the medical lead (see col. 7, ln. 50-col. 8, ln. 9). Although Nelson fails to specifically disclose that the connection between the conductor 44 and the component 30 is formed via a resistance well, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize a resistance weld to connect various components of the medical electrical lead of Nelson, such as the component 30 and conductor 44, in order to connect the components with high stability.

5. Regarding claim 2, it can be seen from Figure 3 of Nelson that the surface has a curved profile.

6. Regarding claims 3-5, it can be seen from Figures 2-5 of Nelson that the component comprises a substantially tubular body and the surface includes inner and outer diameters. Further, Nelson discloses that the component includes an outer electrode surface (see col. 4, ln. 59-col. 5, ln. 18).

7. Regarding claim 6, Nelson discloses the claimed invention essentially as claimed, but fails to specifically disclose that the outer electrode surface includes a titanium nitride coating. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Nelson with a titanium nitride

coating on the outer electrode surface since it was known in the art that titanium nitride coatings are utilized to enhance biocompatibility and improve electrical characteristics.

8. Regarding claims 7 and 8, Nelson discloses that the conductor may be a cable or a coil (see col. 5, ln. 45-47).

9. Regarding claims 9 and 25, it can be seen from Figure 8 that the groove of Nelson may be approximately aligned with a longitudinal axis of the component.

10. Regarding claims 10 and 11, it can be seen from Figure 9 that the groove of Nelson may spiral around a portion of a the component. The Examiner takes the position that a spiraling pattern is one that is approximately transverse to a longitudinal axis of the component.

11. Regarding claims 12 and 13, Nelson discloses that the groove may be generally U-shaped (see Figure 3 and col. 6, ln. 4-20). The Examiner takes the position that a U-shaped groove has an approximately semi-circular cross-section. Furthermore, as a U-shape is simply a smoothed V-shape, the Examiner takes the position that the groove of Nelson has an approximately V-shaped cross-section.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMMIE HELLER whose telephone number is (571)272-1986. The examiner can normally be reached on Monday through Friday from 7am until 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on 571-272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl H. Layno/
Supervisory Patent Examiner, Art Unit 3766

/Tammie Heller/
Examiner, Art Unit 3766